

SOUTHERN UNIVERSITY AND A & M COLLEGE  
PURCHASING DEPARTMENT  
Post Office Box 9534  
J.S. Clark Administration Annex Building  
1st Floor East  
Baton Rouge, Louisiana 70813

**INVITATION TO BID (ITB):**

AUTOMATED SOIL CO2 FLUX SYSTEM

Bids will be received at the above office until 10:00 A.M.-MAY 16, 2006  
and at that time publicly opened. Bids received after above specified time will be  
returned unopened.

**BID OF:** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_

**TO: PURCHASING DEPARTMENT**  
Southern University  
Post Office Box 9534  
Baton Rouge, Louisiana 70813

The undersigned certifies that he or she has (or they have) carefully examined  
the instructions to bidders, the general conditions and specifications here to attached and  
made part thereof, and agreed to comply with such instructions. The undersigned  
proposes to furnish any and all items hereto attached upon which prices are requested at  
prices as stated for each item.

**Bidder:** \_\_\_\_\_  
**Company's Name**

**By:** \_\_\_\_\_

Evidence of Authority to submit the bid shall be required in accordance with  
R.S. 38:2212(a)(1)(c) and/or R.S. 39:1594 (c)(2)(d).

**Date:** \_\_\_\_\_

**Telephone Number** (\_\_\_\_) \_\_\_\_\_

**FAX Number** (\_\_\_\_) \_\_\_\_\_

**BID NUMBER** 9819

BID NO. 9919

**SOUTHERN UNIVERSITY AND A & M COLLEGE  
PURCHASING OFFICE**

**Post Office Box 9534  
Baton Rouge, Louisiana 70813  
Telephone: (225) 771-4580  
FAX: (225) 771-2026**

Date \_\_\_\_\_

**EXECUTION OF BID MUST BE SIGNED IN INK**

In compliance with the request for bids and subject to all conditions thereof, the undersigned offers and agrees, if this bid is accepted within **thirty (30) days** from the date of bid opening, to furnish any or all the items upon which prices are quoted, at the price set opposite each item. Completion time shall be \_\_\_\_\_ consecutive calendar days after Purchase Order, Notice to Proceed and/or Executed Contract is issued.

Any bid (**Construction Only**) submitted in the amount of fifty thousand dollars (\$50,000.00) or more, the Contractor shall certify that he/she is licensed under **R.S. 37:2150-2173** and show his/her license number on the outside of the bid envelope.

Evidence of authority to submit the bid shall be required in accordance with **R.S. 38:2212 (A)(2)(C) and/or R.S. 39:1594(C)(2)(D)**.

**BIDDER** \_\_\_\_\_

**BY** \_\_\_\_\_  
Signature Authority: In Accordance with R.S. 38:2212 (A)(1)(C) and/or R.S. 39:1594 (C)(2)(D)

**Title** \_\_\_\_\_

**Address** \_\_\_\_\_  
*Street/Post Office Box                      City                      State                      Zip Code*

**Telephone/Fax Number(s)** \_\_\_\_\_

**State License Number** \_\_\_\_\_  
*In Accordance with R.S. 37:2150-2173*

THE ITEMS ON THIS PROPOSAL ARE TRANSPORTATION CHARGES PREPAID TO  
SOUTHERN UNIVERSITBATON ROUGE, LOUISIANA 70813

**AUTOMATED SOIL CO2 FLUX SYSTEM**

<i>Item No.</i>	<i>Quantity</i>	<i>Description</i>	<i>Unit Price</i>	<i>Amount</i>
1	1 each	LI-8100 Automated Soil CO2 Flux System or an approved equal (per attached specifications)	_____	_____
2	1 each	LI-8100 CHAMBERS/see attachments 8100-101 Long term chamber	_____	_____
3	1 each	8100-102 Survey chambers, 10cm	_____	_____
4	1 each	8100-103 Survey chamber, 20 cm	_____	_____
5	1 each	LI-8100 ACCESSORIES/see attachments 6400-03 Rechargeable battery	_____	_____
6	1 each	LI-6020 Battery charger	_____	_____
7	1 each	8100-201 Soil temperature probe	_____	_____
8	1 each	8100-202 Soil moisture probe	_____	_____
9	1 each	8100-554 Compact flash memory card	_____	_____
10	1 each	8100-561 Wireless comm. Package	_____	_____
11	1 each	6581-044 8100-101/103 Soil collar (20cm)	_____	_____
12	1 each	6581-060 8100-101 Collar gasket	_____	_____
13	1 each	6560-228 8100-102 Soil collar (10cm)	_____	_____
14	1 each	6560-229 8100-102 Foam gasket	_____	_____
15	1 each	6581-057 8100-102 Manifold gasket	_____	_____
16	1 each	6581-065 8100-102 Survey collar gasket	_____	_____

*Automated Soil CO2 Flux System*  
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17	1 each	6581-066 8100-102 Chamber flange gasket	_____	_____
18	1 each	6581-057 8100-103 Manifold gasket	_____	_____
19	1 each	6581-107 8100-103 Collar foam gasket	_____	_____
20	1 each	6581-108 8100-103 Soil collar gasket	_____	_____
21	1 each	392-07713 Serial to USB adapter	_____	_____
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*VENDOR NOTE CAREFULLY:*  
*We may indicate stock and/or model numbers as a guide, but we will consider an approved equal. If not bidding as specified, we'd like to have vendors' complete description and/or specifications of item(s). Failure to submit manufacturers' specifications for comparison and awarding purposes will result in rejection of bid.*

The LI-8100 is a complete and dedicated system for continuous, unattended long-term measurement of fast, repeatable survey measurements. A novel pressure vent design allows chamber pressure to track ambient pressure under calm and windy conditions.

LI-8100	Automated Soil CO <sub>2</sub> Flux System .....
	Includes Analyzer Control Unit, Auxiliary Sensor Interface, Serial Cable Interface, RS-232 Serial Cable, RS-232 to USB Adapter, Spares Kit, Compact Flash Memory Card, PC Card Adapter, Shoulder Strap Kit, Software CD (Windows* and Palm* Interface plus Data Analysis Software) and Instruction Manual (Chamber, Battery and Battery Charger not Included)

LI-8100 Chambers

8100-101	Long-Term Chamber .....
	Includes gasket kit, spares kit and two soil collars
8100-102	Survey Chamber, 10 cm .....
	Includes 8100-201 soil temperature probe, gasket kit, spares kit and six soil collars
8100-103	Survey Chamber, 20 cm .....
	Includes 8100-201 soil temperature probe, gasket kit, spares kit and six soil collars

LI-8100 Accessories

6400-03	Rechargeable Battery .....
	Provides 3 or more hours of battery life.
LI-6020	Battery Charger (92-138/184-276 VAC, 47 to 63 Hz) .....
8100-201	Soil Temperature Probe (Omega*) .....
	Type E, -40 to >100°C
8100-202	Soil Moisture probe (ECH <sub>2</sub> O*) .....
	Volumetric water content, 0 to saturation
8100-554	Compact Flash Memory Card .....
	Industrial grade, 128 MB, Type 1.
8100-561	Wireless Communications Package .....
	Includes Palm* PDA, Serial Cable for the PDA, Cisco* Wireless Card (802.11b), and Palm* Universal Travel Kit. (Wireless communication may not work in all locations or at all times due to local interferences. For this reason a serial cable backup is included.)
6581-044	8100-101 or 8100-103 Soil Collar (20 cm) .....
6581-060	8100-101 Collar Gasket .....
6560-228	8100-102 Soil Collar (10 cm) .....
6560-229	8100-102 Foam Gasket .....
6581-057	8100-102 Manifold Gasket .....
6581-065	8100-102 Survey Collar Gasket (w/screw holes) .....
6581-066	8100-102 Chamber Flange Gasket .....
6581-057	8100-103 Manifold Gasket .....
6581-107	8100-103 Collar Foam Gasket .....
6581-108	8100-103 Soil Collar Gasket (w/ screw holes) .....
392-07713	Serial to USB adapter .....

The LI-6400 is recognized as the premier photosynthesis system in the world due to its performance, flexibility and integration. It is the most referenced photosynthesis system and can be used to make simultaneous gas exchange and fluorescence measurements over the same leaf area.

LI-6400	Portable Photosynthesis System .....
	Includes system Console with 128 MB RAM for operation and 64 MB data storage, Sensor Head with CO <sub>2</sub> /H <sub>2</sub> O Analyzers, Standard 6 cm <sup>2</sup> Leaf Chamber with Internal PAR Sensor, 4 Rechargeable Batteries, Battery Charger, RS-232 Serial Cable, RS-232 to USB Adapter, Windows* Software, Spare Leaf Temperature Thermocouple, Field Stand, two Scrub Tubes, Spares Kit, Instruction Manuals and Carrying Case.



9919

- An NDIR CO<sub>2</sub> and H<sub>2</sub>O gas analyzer: pressure corrected, temperature controlled optical bench for low zero and span drift, factory calibrated for high accuracy, user-cleanable optics, and measurement that allows for dilution corrections
- A novel pressure vent designed to maintain the pressure equilibrium between inside and outside the chamber under both windy and calm conditions
- A Rotary pump that moves air with minimum pressure pulse (diaphragm pumps typically used in other systems cause a pressure pulse which may perturb the CO<sub>2</sub> flux from the soil)
- Choice of 10 cm or 20 cm survey chambers, automated to eliminate user perturbations of the chamber
- A 20 cm long-term chamber that moves away from the measurement area when it is not in measurement mode to minimize the chamber effects on the natural soil conditions
- A gasket system that prevents leaks and minimizes mechanical disturbance of the soil as the chamber opens and closes
- Wireless communication using a Palm PDA
- Compact Flash Card data storage
- Weatherproof enclosure for the gas analyzer and system electronics
- Can connect to a multiplexer designed for up to 16 chambers
- Windows and Palm interface software
- Data Analysis software, allows for post-processing of data files
- Uses an exponential data fit for flux rate estimation to minimize the impact of CO<sub>2</sub> diffusion gradient change inside the chamber
- Operating temperature range of -20 to +45 °C
- Voltage channels for ancillary measurements (soil temperature, moisture, etc.)



SPECIAL CONDITIONS  
BIDDER'S CERTIFICATION OF EEOC AND ADA COMPLIANCE

Southern University and A&M College Systems of the State of Louisiana is an equal opportunity employer and looks to its contractors, sub-contractors, vendors, and suppliers to take affirmative action to effect this commitment in its operations.

By submitting and signing this bid, the bidder certifies that he agrees to adhere to the mandates dictated by Title VI and VII of the Civil Rights Act of 1964, as amended; the Vietnam Era Veterans' Readjustment Assistance Act of 1974; Section 503 of the Rehabilitation Act of 1973; Section 202 of Executive Order 11246, as amended; and the Americans with Disabilities Act of 1990. Bidder agrees that he will not discriminate in the rendering of services to and/or employment of individuals because of race, color, religion, sex, age, national origin, handicap, disability, veteran status, or any other non-merit factor.

Bidder further agrees to keep informed of and comply with all Federal, State, and local laws, ordinances, and regulations which affect his employees or prospective employees.

Any person who is a "Qualified Individual with a Disability" as defined by 42 USC 12131 of the American with Disabilities Act who has submitted a bid on this procurement and who desires to attend the bid opening, must notify this office in writing no later than seven (7) working days prior to the bid opening date of their need for special accommodations. If the requested accommodations cannot be reasonably provided, the individual will be so informed prior to the bid opening.

R.S. 39: 1594 (Act 121)

Evidence of authority to submit the bid shall be required in accordance with R.S. 38:2212 (A)(1)(C) and/or R.S. 39:1594 (C) (2) (D).

"Signature Authority: In accordance with L.R.S. 39:1594 (Act 121) the person signing the bid must be:

1. A current corporate officer, partnership member or other individual specifically authorized to submit a bid as reflected in the appropriate records on file with the Secretary of State; or
2. An individual authorized to bind the vendor as reflected by an accompanying corporate resolution, certificate or affidavit; or
3. An individual listed on the State of Louisiana Bidder's Application as authorized to execute bids.

By signing the bid, the bidder certifies compliance with the above."

VENDOR PREFERENCES

In accordance with the Louisiana Revised Statutes 39:1595, a preference of 10% may be allowed for products produced, manufactured, grown or assembled in Louisiana of equal quality.

Do you claim this preference? Yes \_\_\_\_\_ No \_\_\_\_\_

SPECIFY ITEM NUMBER(S) \_\_\_\_\_

FAILURE TO SPECIFY ABOVE INFORMATION MAY CAUSE ELIMINATION FROM PREFERENCES.

SPECIAL CONDITIONSTax Information/State of Louisiana

In accordance with Act Number 1029 of the 1991 Regular Session, effective September 1, 1991 state agencies will no longer be required to pay state sales tax.

BID BOND

A bid bond, cashier's check, or certified check, in the amount of 5% of the total bid, made payable to Southern University and A&M College, must accompany each bid.

If a bid bond is used, it shall be written by a surety or insurance company currently on the U.S. Department of the Treasury Financial Management Service list of approved bonding companies which is published annually in the Federal Register, or by a Louisiana domiciled insurance company with at least an A-rating in the latest printing of the A.M. Best's Key Rating Guide to write individual bonds up to ten percent of policyholders' surplus as shown in the A.M. Best's Key Rating Guide.

REQUIRED: Yes \_\_\_\_\_ No XXX 

PERFORMANCE AND/OR PAYMENT BOND

The successful vendor will be notified by letter to secure a Performance and/or Payment Bond equal to the contract sum, from a surety or insurance company currently on the U.S. Department of the Treasury Financial Management Service list of approved bonding companies which is published annually in the Federal Register, or by a Louisiana domiciled insurance company with at least an A-rating in the latest printing of the A.M. Best's Key Rating Guide or by an insurance company that is either domiciled in Louisiana or owned by Louisiana residents and is licensed to write surety bonds.

In addition, any performance and/or payment furnished shall be written by a surety or insurance company that is currently licensed to do business in the State of Louisiana.

The Bond must be received within twelve (12) days from the date of notification.

If the Bond is not received within this period of time, Southern University reserves the right to award to the next acceptable low bidder, or to reject all bids and re-advertise, whichever is in the best interest of Southern University and the State of Louisiana.

REQUIRED: Yes \_\_\_\_\_ No XXX 



BIDDERS MUST COMPLY WITH ALL REQUIREMENTS ON THESE PAGES. IF THIS PAGE IS NOT RETURNED WITH BID, CONFIRMATION THAT YOU ARE COMPLYING WITH ALL REQUIREMENTS WILL BE REQUIRED PRIOR TO AWARD.

### SOUTHERN UNIVERSITY BATON ROUGE

Southern University Purchasing Department will receive sealed bids until the time and date(s) specified in this Invitation for Bid (IFB). No bid will be considered if received by the Purchasing Department after specified time and date(s). Beginning at that time, bids will be publicly opened, and read in the Conference Room- 1 st Floor East of the J.S. Clark Administration Annex Building, or otherwise made available.

Bids shall be mailed to:

Southern University  
Purchasing Department  
Post Office Box 9534  
Baton Rouge, Louisiana 70813

As an alternative, bids may be hand delivered to:

Southern University  
Purchasing Department  
1 st Floor East - James L. Prestage Drive  
J.S. Clark Administration Annex Building.  
Baton Rouge, Louisiana 70813

Bids submitted are subject to provisions of La. R.S. 39:1551-1736; Purchasing Rules and Regulations; Executive Orders; the General Conditions; and Special Condition; and Specifications listed in this Invitation for Bid.

#### INSTRUCTIONS TO BIDDERS

##### 1. Bid Forms

All written bids, unless otherwise provided for, must be submitted on, and in accordance with, forms provided, properly signed. Bids submitted in the following manner will not be accepted:

1. Bid contains no signature indicating intent to be bound;
2. Bid filled out in pencil; and
3. Bid not submitted on University standard forms.

Bids must be received at the address specified in the Invitation for Bids prior to bid opening time in order to be considered. Telegraphic and fax alterations to bids received before bid opening time will be considered provided formal bid and written alteration have been received and time-stamped before bid opening time.

##### 2. Special Envelopes.

To assure consideration, all bids should be submitted in the special envelope if furnished for that purpose. In the event bid contains bulky subject material, the special bid envelope should be firmly affixed to the mailing envelope.

##### 3. Standard of Quality.

Any product or service bid shall conform to all applicable Federal and State laws and regulations and the specifications contained in the IFB. Unless otherwise specified in the IFB, any manufacturer's name, trade name, brand name, or catalog number used in the specifications is for the purpose of describing the quality level and characteristic required. Bidder must specify the brand and model number of the product offered in his/her bid. Bids not specifying brand and model numbers will be considered as offering the exact products specified in the IFB.

##### 4. Descriptive Information.

Bidders proposing an equivalent brand or model should submit the bid information (such as illustrations, descriptive literature, technical data) sufficient for the University to evaluate quality, suitability, and compliance with the specifications in the IFB. Failure to submit descriptive information may cause bid to be rejected. Any change made to a manufacturer's published specification submitted for a product shall be verifiable by the manufacturer. If item(s) bid do not fully comply with specifications (including brand and/or product number), bidder must state in what respect the item(s) deviate. Failure to note exceptions on the bid form will not relieve the successful bidder(s) from supplying the actual products requested.

##### 5. Bid Opening.

Bidders may attend the bid opening, but no information or opinions concerning the ultimate contract award will be given at the bid opening or during the evaluation process. Bids may be examined 72 hours after request is made. Information pertaining to completed files may be secured by visiting the Purchasing Department during normal working hours. Written bid tabulations will not be furnished.

## GENERAL CONDITIONS

Southern University reserves the right to award items separately, grouped or on an all-or-none basis and to reject any or all bids and waive any information

1. Prices.

Unless otherwise specified by the Purchasing Department in the IFB, bid prices must be complete, including transportation, prepaid by bidder to destination. Bids other than FOB destination may be rejected.

2. Payment Terms.

Cash discounts for less than 30 days or less than 1% or greater than 5% will be accepted, but will not be considered in determining awards. On indefinite quantity term contracts, cash discounts will be accepted and taken but will not be considered in determining awards. Bids containing "payment in advance" or "COD" requirements may be rejected. Payment is to be made within 30 days after receipt of properly executed invoice or delivery, whichever is later.

3. Deliveries.

Bids may be rejected if the delivery time indicated is longer than that specified in the IFB.

4. Taxes.

Vendor is responsible for including all applicable taxes in the bid prices.

5. New Products.

Unless specifically called for in the IFB, all products for purchases must be new, never previously used, and the current model and/or packaging. No remanufactured, demonstrator, used or irregular product will be considered for purchase unless otherwise specified in the IFB. The manufacturer's standard warranty will apply unless otherwise specified in the IFB.

6. Contract Renewals.

Upon agreement of Southern University and the contractor, an open-ended requirements contract may be extended for two (2) additional twelve (12) month periods at the same prices, terms and conditions. In such cases, the total contract term cannot exceed thirty-six (36) months.

7. Contract Cancellation.

Southern University has the right to cancel any contract, in accordance with Purchasing Rules and Regulations, for cause, including but not limited to, the following: (1) failure to deliver within the time specified in the contract; (2) failure of the product or service to meet specifications, conform to sample quality or to be delivered in good condition; (3) misrepresentation by the contractor; (4) fraud, collusion, conspiracy or other unlawful means of obtaining any contract with the state; (5) conflict of contract provisions with constitutional or statutory provision of state or federal law; (6) any other breach of contract.

8. Default of Contractor.

Failure to deliver within the time specified in the bid will constitute a default and may cause cancellation of the contract. Where the state has determined the contractor to be in default, the state reserves the right to purchase any or all products or services covered by the contract on the open market and to charge the contractor with cost in excess of the contract price. Until such assessed charges have been paid, no subsequent bid from the defaulting contractor will be considered.

9. Order of Priority.

In the event there is a conflict between the Instructions to Bidder or General Conditions and the Special Conditions, the Special Condition shall govern.

10. Applicable Law.

All contracts shall be constructed in accordance with and governed by the laws of the State of Louisiana.

11. Equal Opportunity.

By submitting and signing this bid, bidder agrees that he will not discriminate in the rendering of services to and/or employment of individuals because of race, color, religion, sex, age, national origin, handicap, disability, veteran status, or any other non-merit factor.